MISCELLANEA ZOOLOGICA HUNGARICA
Tomus 12. 1998 p. 21–44

Checklist, preliminary distribution maps, and bibliography of woodlice in Hungary (Isopoda: Oniscidea)

by
L. Forró and S. Farkas
(Received June 22, 1998)

Abstract: A checklist of terrestrial Isopoda containing 42 species from Hungary is given. The history of the scientific investigations of Oniscidea of Hungary is briefly reported. For each species the following data are provided: important synonyms, localities from Hungary with the reference number of the publication. Distribution is mapped using the UTM grid system.
Key words: Crustacea, Isopoda: Oniscidea, Hungary, mapping

Introduction

Studies on the Hungarian Crustacea fauna started over 150 years ago. Although the first publications already included data on terrestrial isopods, however, compared to other crustaceans, the group was neglected for a long time. Csiki (1926) published the first comprehensive survey on Oniscidea. In his paper he gave species descriptions as well as identification keys. The most recent summary on the Hungarian woodlice fauna was published by Dudich (1942), listing all species and the literature from the territory of Hungary at that time. During the last five decades several papers contributed to our knowledge of the terrestrial isopod fauna.

Our aim was to provide a checklist of the Oniscidea in Hungary, and to briefly review and summarize the information on their taxonomy, natural history and ecology, published so far. We hope the present paper will stimulate further research on terrestrial isopods in the future. The present checklist containing 42 species is based on all the records published in the literature from the present Hungarian territory. The following data are provided for each species on the checklist: (a) important synonyms; (b) localities with numbers of bibliographic references. For the latter the comprehensive synopsis by Csiki (1926) is taken as a starting point therefore no references previous to 1926 are mentioned in the list. The distribution of each species in Hungary is mapped using the UTM grid system. The maps are attached at the end of the paper.

History

Below is a brief survey of the scientific research on woodlice including literature only from the territory of the present day Hungary.

The first data on terrestrial Isopoda was probably published by Schmidl (1856), where *Titanethes albus* was recorded from Baradla Cave at Aggtelek. Interestingly, later on it

turned out to be wrong, since *Mesoniscus graniger* (*T. graniger*) inhabits the cave (e.g. Dudich, 1932). This latter was described as a new species (*Titanethes graniger*) by J. Frivaldszky (1865), and in another paper I. Frivaldszky (1865) also illustrated it.

Chyzer & Tóth (1857a, b) and Chyzer (1858) reported Isopoda records primarily from Budapest. Margó (1879), studying the same region, added three more species to its fauna. Daday (1896) listed eight Isopoda species from the territory of Hungary of that time, which was, unfortunately, incomplete. The woodlice material of the collection of the National Museum was published by Dollfus (1901), listing 26 species, twelve of which came from the present territory of Hungary, while further four species were listed with the vague locality "Hongrie". The first detailed summary of the Hungarian Isopoda – containing descriptions of species and identification keys – was compiled in 1906, but it was only published 20 years later with minor updating (Csiki 1926). For this reason it was seriously criticised (Méhely 1933). Csiki (1926) provided a list of 110 species in the Appendix, 23 of them were known from the present day Hungary.

Between the two World Wars two researchers specialised in Isopoda publishing nine papers: Kesselyák (1928, 1930, 1935/36, 1936, 1937) and Méhely (1927, 1929, 1932, 1933). Further faunistical data on woodlice can be found in the publications by Dudich (1925, 1928, 1932, 1933), Kolosváry (1937) and Pongrácz (1936). During this period and also earlier Karl W. Verhoeff, the renowned isopod specialist published numerous papers on the fauna of the Austro-Hungarian Empire. We do not discuss these articles in the present paper, because in their comprehensive works both Csiki (1926) and Dudich (1942) thoroughly reviewed Verhoeff's studies on the Hungarian Isopoda species. A detailed list of these papers is given in Dudich's survey (1942), which is the last comprehensive faunistical study of the Hungarian Isopoda fauna.

More than sixty percent of the papers listed in the References was published after World War II. One of the most prominent scientists of this period was Imre Loksa (1923–1992). He was an internationally recognized expert in the taxonomy of Diplopoda and Arachnoidea. His interest was much broader, however. His research focused on patterns of distribution and structure of soil arthropod communities. He surveyed the soil meso- and macrofauna in several parts of Hungary, and published primarily faunistical and cenological papers (see nos 41-54 in References). Articles only with data on Isopoda are given. This is the time, when ecology began to emerge in Hungary as a distinct field in natural sciences. In part due to the International Biological Program the focus of the research shifted from purely descriptive studies to more experimental work. The objective of these studies was to reveal not only the structural but the functional characteristics of communities.The first such data on food consumption and bioenergetics of Isopoda were published by Gere (1956, 1959, 1962, 1963, 1964, 1965).

In the past twenty years a new generation of isopodologists appeared. The scope of their work is more diversified than ever before. While studies on the Hungarian Isopoda fauna continued, the majority of the surveyed sites were national parks, biosphere reserves or otherwise protected areas, thus emphasizing issues in nature conservation (Allspach & Szlávecz 1990, Allspach 1996, Farkas 1995, Ilosvay 1983a, 1985, Lantos 1985, Sallai 1992a,b, 1993, Szlávecz 1988, 1991, Szlávecz & Loksa 1991). Population characteristics and population dynamics for several isopod species were reported by Farkas (1998b), Hornung (1984, 1988, 1989, 1991), Ilosvay (1983), Sallai (1993), Szlávecz (1988, 1995). Ilosvay (1982b) studied patterns of diurnal locomotory activity in isopods and diplopods. Aspects of isopod feeding ecology (food selection, coprophagy, productivity) and their role in the decomposition of

terrestrial and aquatic detritus were the subjects of several papers (Hornung 1981, Pobozsny 1978, Szlávecz 1985, 1991, 1992, 1993, Szlávecz & Maiorana 1990, 1998, Szlávecz & Pobozsny 1995). Recently, the u biquitous *Porcellio scaber* Latr., has become a test species for exotoxicological essays (Fischer *et al.* 1997, Hornung *et al.* 1998).

Taxonomy

The nomenclature and taxonomy used in the present paper is based on Gruner (1966).

1. Pongrácz (1936) mentioned *Tithanetes albus* Schiödte, 1849 from Hungary in the cave of Aggtelek. Dudich (1942) considered it erroneous, therefore this data was not included in the present checklist.

2. Csiki (1926) and Dudich (1942) also listed *Tracheoniscus magyaricus* (Verhoeff, 1907) from Budapest. In the most recent revision of the genus *Trachelipus* Schmidt (1997) considered it (*Porcellio magyaricus*) as a *nomen nudum*, therefore the species was omitted from the checklist.

3. Dollfus (1901) reported *Armadillidium pallasi* and, based on this record the species was also listed by Csiki (1926) and Dudich (1942). However, because only the vague locality "Hungary" was given we omitted it from the present checklist.

4. The data of *Tracheonicus affinis* C. L. Koch (Csiki 1926, Dudich 1942) from Budapest is problematic, too. Schmidt (1997) reported that Verhoeff misidentified and named a specimen of *Trachelipus difficilis* as *Tracheoniscus affinis*. After this, many author used incorrectly the name *Tracheoniscus affinis* C. L. Koch, 1841 because this is not identical with *Porcellio affinis* C. L. Koch which is the synonym of *Trachelipus rathkii* Brandt, 1833. It is possible that the pending specimen belongs rather to *T. rathkii* Brandt, 1833.

5. It cannot be decided which species could be the following ones: *Trichoniscus germanicus* Verhoeff (Csiki 1926), *Hyloniscus vividus* C. L. Koch, *Trichoniscus germanicus* Verhoeff, *Hyloniscus narentanus* Verhoeff (Dudich 1942). Csiki (1926) mentioned *Trichoniscus germanicus* Verhoeff from the Mecsek Mts. Dudich (1942) cited it as a synonym of *Hyloniscus vividus* C. L. Koch. Simultaneously, four rows below *Hyloniscus narentanus* Verhoeff appears as the synonym of *H. vividus* C. L. Koch, too. Wächtler (1937) has the opinion that *H. riparius* C. L. Koch, 1838, *H. vividus* Koch, 1841 and *Itea riparia* C. L. Koch are the same species. Moreover, Wächtler (1937) recommends that it would be better the species which was described by Koch (1841) as *Itea vivida* (= *H. vividus* Verhoeff) to name as *H. narentanus* Verhoeff, 1908. Gruner (1966) reports that all the *Itea riparia* C. L. Koch, 1838, *Trichoniscus germanicus* Verhoeff, 1908 and *Hyloniscus vividus* Verhoeff, 1908 are synonyms of *H. riparius* C. L. Koch, 1838, but *Itea vivida* C. L. Koch, 1841 is another species. The problem cannot be resolved without the re-examination of the original specimens.

6. Lantos (1985) reported *Hyloniscus dalmaticus* Verh. (sic) from a mixed oak-pine forest in the Barcs Juniper Woodland preservation area. No descriptive details were given by the author, therefore this species was not included in the present checklist.

List of species

Ligiidae

1. *Ligidium germanicum* (Cuvier, 1792)
Loc. Abaliget (10, 16); Kőszegdoroszló (38); Kőszeg Mts (10, 38); Mecsek Mts (10, 5).

2. *Ligidium hypnorum* Verhoeff, 1901
Loc. Babócsa (12); Bakháza (13); Bélapátfalva (2); Bükkzsérc (2); Gyékényes (12); Heresznye (12); Kőszegdoroszló (38); Kőszeg Mts (10, 38); Miskolc (2); Nagyvisnyó (2); Őrtilos (12); Somogyudvarhely (12); Szarvaskő (2); Szilvásvárad (2); Velem (38); Zákány (12).

Mesoniscidae

3. *Mesoniscus graniger* (Frivaldszky, 1865)
Syn. *Titanethes graniger* Frivaldszky, 1865
Loc. Aggteleki barlang (5, 8, 10, 21, 22, 57, 58); Bükk Mts (37); Égerszög (46); Sátoraljaújhely (10, 37).

Trichoniscidae

4. *Androniscus dentiger* Verhoeff, 1908
Syn.: *Itea dentigera* Verhoeff ?
Loc. Budapest (10, 35, 57).

5. *Androniscus roseus* (C. L. Koch, 1838)
Syn. *Androniscus carynthiacus* Verhoeff 1908
Loc. Tapolca (44); Budapest (10, 35); Cák (38); Csillaghegy (Budapest) (10); Kőszegdoroszló (38); Kőszeg Mts (10, 38).
Rem. "Hungary" (10).

6. *Calconiscellus karawankianus* Verhoeff, 1900
Syn. *Cyphoniscellus karawankianus* Verhoeff, 1900
Loc. Pusztamagyaród (10, 35); Somogyudvarhely (12).

7. *Haplophthalmus danicus* Budde-Lund, 1880
Loc. Albertfalva (7, 10, 64); Budapest (7, 10, 33, 64); Bükk Mts (64); Csillaghegy (Budapest) (10, 33, 64); (Új)Dombóvár (7, 10, 64); Kőszegdoroszló (10, 38, 64); Kőszeg Mts (10, 38, 64); Ócsa (61, 63); Rudabánya, Tornai karszt (64); Tapolca (44); Tihany (10, 36, 64).
Rem. "Alföld" (5, 33, 64).

8. *Haplophthalmus hungaricus* Kesselyák, 1930
Loc. Bátorliget (1, 72, 73); Csillaghegy (Budapest) (1, 64); Ómassa (1, 10, 33, 35, 64); Lillafüred (64); Sátoraljaújhely (1, 10, 35, 64).

9. *Haplophthalmus mengii* Zaddach, 1844
Loc. Börzsöny (10, 33, 37, 64); Budai Mts (10, 33, 37, 64); Bükk Mts (10, 33, 37, 64); Csillaghegy (Budapest) (33); Füzérkomlós (64); Hegyalja (10, 37, 64); Jósvafő (64); Kőszeg Mts (10, 33, 38, 64); Mátra (10, 33); Tahi (64); Sárvár (7, 10, 64); Sátoraljaújhely (64); Rudabánya (37, 64); Visegrád Mts (10, 37, 64); Vízvár (12); Zákány (12).

10. *Haplophthalmus montivagus* Verhoeff, 1941
Loc. Szarvaskő (64); Miskolctapolca (64).

11. *Hyloniscus riparius* (C. L. Koch, 1838)
Syn. *Trichoniscus germanicus* Verhoeff, 1901; *Hyloniscus germanicus* Verhoeff, 1901?; *Hyloniscus vividus* Verhoeff, 1908; *Hyloniscus riparius* mutatio *oedematicus* Méhely, 1929; *Hyloniscus riparius* mutatio *nigropunctatus* Méhely, 1929)
Loc. Abaliget (10, 16, 56); Babócsa (12); Bakháza (13); Barcs, Szilonicspuszta (12); Basaharc (68); Bélapátfalva (2); Bélavár (12); Bolhó (12); Börzsöny Mts (10, 56); Budapest (10, 56, 57); Bükk-Mts (10, 50, 56); Cserépfalu (2, 10, 56); Diósjenő (56); Dömös (10, 56); Drávafok (12); Drávakeresztúr (12); Drávaszabolcs (12); Drávasztára (12); Felsőszentmárton (12); Gordisa (14); Gyékényes (12); Kemse (12); Kisszentmárton (12); Kőszeg (10, 56); Kőszeg-

doroszló (10, 38, 56); Kőszeg Mts (10, 38); Kőszegszerdahely (=Szerdahely) (10, 56); Lakócsa (12); Lébény (10, 56); Mailáthpuszta (11); Matty, Keselyősfapuszta (12); Mecsek Mts (5, 10); Miskolc (2); Noszvaj (10, 56); Ócsa (61, 63); Őrtilos (12); Piskó (12); Somogyudvarhely (12); Szaporca (12); Szár (56); Szarvaskő (2); Szeged (10, 56); Szendehely (53); Szilvásvárad (2); Szokolya (10, 56); Szombathely, (10, 56); Tapolca (44, 56); Tihany (10, 36); Vejti (12); Velem (10, 56); Visegrád (10); Visegrád (56); Vízvár (12); Zákány (12); Zalaegerszeg (10, 56); Zirc (33).
Rem.: "West-Hungary" (10).

12. *Hyloniscus transsylvanicus* (Verhoeff, 1901)
Loc. Bátorliget (1, 10, 56, 66, 72, 73); Bükk Mts (10, 56); Lillafüred (10); Sátoraljaújhely (10, 56).

13. *Trichoniscus noricus* Verhoeff, 1917, 1931
Syn. *Spiloniscus noricus* Verhoeff, ?, *Trichoniscus plitvicensis* Verhoeff, 1930
Loc. Börzsöny Mts (10, 35, 37); Hegyalja (37); Kőszeg Mts (10, 38); Mátra Mts (10, 35, 37); Sátoraljaújhely (35); Visegrád (10).

14. *Trichoniscus austriacus* Verhoeff, 1908
Syn. *Tachyoniscus austriacus* Verhoeff, 1908
Loc. Kőszeg Mts (10, 38, 55); Kőszegszerdahely (=Szerdahely) (10, 55); Velem (10, 38, 55, 56, 57).

Platyarthridae

15. *Platyarthrus hoffmannseggii* Brandt, 1833
Loc. Bakony (6, 10); Balatonszemes (6, 10); Bakony Mts (6); Börzsöny Mts (6, 10); Budapest (6, 10, 60); Cák (38); Deszk (6, 10); Drávafok (12); Gyékényes (12); Keszthely Mts (49); Kovácshida (12); Kőszeg Mts (10, 38); Mailáthpuszta (11, 12); Mátra (6, 10); Mecsek (6, 10); Nagykovácsi (49); Pilis Mts (6, 10); Sárrét (6); Sárszentmihály (10); Somogyudvarhely (12); Sopron (6, 10); Tihany (10, 36); Tornai karszt (6); Visegrád Mts (6, 10); Vízvár (12); Zákány (12).
Rem.: "Hungary" (5); Pécs, Dombóvár (Farkas, unpublished data).

Philoscidae

16. *Lepidoniscus minutus* (C. L. Koch, 1838)
Syn. *Philoscia germanica* Verhoeff, 1896; *Lepidoniscus germanicus* var. *pannonicus* Verhoeff, 1928
Loc. Abaliget (10); Bakony Mts (45); Bükkzsérc (2); Cserépfalu (2); Felsőtárkány (2); Kőszeg Mts (10, 38); Kőszegdoroszló (38); Mecsek (37); Szilvásvárad (2); Velem (38); Vindornyaszőlős (47).
Rem. "West-Hungary" (10).

17. *Philoscia affinis* Verhoeff, 1908
Loc. Bakonybél (51).

Oniscidae

18. *Oniscus asellus* Linnaeus, 1758
Loc. Budapest (5, 10, 41); Tihany (10, 36); Zirc (33).

Cylistidae

19. *Cylisticus convexus* De Geer, 1778
Loc. Aggtelek (8, 10); Babócsa (12); Balatonfüred (43); Budapest (5, 10, 71); Cserépfalu (2); Gyékényes (12); Kovácshida (12); Kőszeg Mts (10, 38); Lillafüred (48); Monor (5, 10); Pápa (5, 10); Szeged (4); Tapolca (44); Tihany (10, 36); Újszentmargita (69); Zákány (12); Zirc (33).

Porcellionidae

20. *Porcellio dilatatus* Brandt, 1833
Loc. Budapest (5, 10).
Rem. The species was only found by Margó (1879), subsequent references (Csiki, 1926; Dudich, 1941) refer to his record. Nobody has found it neither in natural nor in synanthropic sites since then, so it is possible that it is not native in Hungary today.

21. *Porcellio laevis* Latreille, 1804
Loc. Budapest (5, 10); Pápa (5, 10); Tihany (10, 36).

22. *Porcellio monticola* Lereboullet, 1853
Syn. *Porcellio lugubris* C. L. Koch, 1841.
Loc. Budapest (60); Pápa (5, 10, 60); Újpest (5, 10).

23. *Porcellio scaber* Latreille, 1804
Loc. Babócsa (12); Bakháza (13); Balatonfüred (43); Barcs, Szilonicspuszta (12); Bodajk (5, 10); Budapest (5, 10, 41); Drávafok (12); Drávakeresztúr (12); Drávaszabolcs (12); Drávasztára (12); Felsőszentmárton (12); Kemse, Háromfa (12); Kisszentmárton (12); Kovácshida (12); Kőszeg Mts (10, 38); Mailáthpuszta (11); Matty, Keselyősfapuszta (12); Noszvaj (Síkfőkút) (3); Pápa (5, 10); Piskó (12); Tihany (10, 36); Újpest (5, 10); Újszentmargita (69); Vejti (12).

24. *Porcellio spinicornis* Say, 1818
Syn. *Porcellio pictus* Brandt, 1833
Loc. Aggtelek (8, 10); Bodajk (5, 10); Budapest (5, 10); Cserépfalu (2); Felsőtárkány (2); Nagyvisnyó (2); Pápa (5, 10); Pilisszentiván (62); Szilvásvárad (2); Tihany (10, 36).

25. *Porcellionides pruinosus* Brandt, 1833
Syn. *Metoponorthus pruinosus* Brandt, 1833.
Loc. Bátorliget (1); Budapest (5, 10); Kőszeg Mts (10, 38); Nyírbátor (1); Pápa (5, 10); Tihany (10, 36).

Trachelipodidae

26. *Orthometopon planum* Budde-Lund, 1885
Loc. Bakony Mts (45); Bélapátfalva (2); Budai Mts (10, 18, 19, 20, 49); Bükk Mts (10, 37, 49); Cserépfalu (2); Noszvaj, Síkfőkút (65); Gerecse (49); Hegyalja (10, 37); Kosd (42); Mátra Mts (10, 37); Miskolc (2); Nagykovácsi (49); Nagyvisnyó (2); Pilisszentiván (62); Sárospatak (37); Szarvaskő (2, 10, 37); Szendehely (53); Szilvásvárad (2); Tatabánya (49); Tornanádaska (49).

27. *Porcellium collicola* Verhoeff, 1907
Loc. Aszófő (10); Babócsa (12); Bakháza (13); Bakony Mts (45, 49); Bakonybél (51); Balatonarács (49); Balatonberény (70); Basaharc (68); Bátorliget (1, 72, 73); Bélapátfalva (2, 49); Bolhó (12); Budai Mts (19, 20, 49); Bükk Mts (49, 50, 54); Bükkzsérc (2); Celldömölk (10); Csákvár (49); Cserépfalu (2); Felsőtárkány (2); Gerecse Mts (49); Hortobágy (69); Jósvafő (49); Kemse, Háromfa (12); Keszthely Mts (49); Kisszentmárton (12); Kőszegdoroszló (38); Kőszeg Mts (10, 38); Mecsek Mts (49); Miskolc (2); Nagykovácsi (49); Noszvaj, Síkfőkút (65); Ócsa (61, 63); Óhat (69); Pápa (10); Páty (49); Pilis Mts (49); Pilisborosjenő (49); Pilisszentiván (49, 62); Répáshuta (2); Ság-hegy (37); Somló-hegy (49); Somogyudvarhely (12); Szarvaskő (2, 49); Szendehely (53); Szilvásvárad (2); Tatabánya (49); Tihany (10, 36); Tornanádaska (49); Újszentmargita (52, 69); Vértes Mts (49); Villány Mts (49); Visegrád Mts (49); Vízvár (12); Zirc (30, 33).

28. *Porcellium conspersum* (C. L. Koch, 1841)
Syn. *Porcellio conspersus* C. L. Koch, 1841
Loc. Miskolc (2); Nagyvisnyó (2); Pápa (5); Szilvásvárad (2).
Rem. The record from Pápa (Csiki, 1926) refers to *P. collicola*, according to Kesselyák (1938).

29. *Porcellium graevei* Verhoeff, 1919
Syn. *Porcellio horváthi* Dollfus, 1901
Loc. Kőszeg Mts (10, 38).

30. *Protracheoniscus amoenus* (C. L. Koch, 1841)
Syn. *Metoponorthus amoenus* Koch, 1841; *Protracheoniscus Méhelyi* Kesselyák, 1930
Loc. Aggtelek (23); Bakony (45, 49); Bakonybél (51); Balatonarács (49); Basaharc

(68); Bélavár (12); Buda Mts (19, 20, 23, 49); Budapest (5, 10, 60); Bükk Mts (50, 54); Csákvár (49); Cserhát (67); Csókakő (59); Farkasgyepű (31, 32); Keszthely Mts (49); Kőszegdoroszló (38); Kőszeg Mts (10, 38); Lillafüred (48); Mecsek Mts (49); Noszvaj, Síkfőkút (65); Páty (49); Pilisszentiván (49); Tatabánya (49); Szár (53); Szendehely (53); Velem (38); Vértes Mts (49); Villány Mts (49); Vindornyaszőlős (47); Zirc (30,33).
Rem.: 59 km North-West from Budapest (71).

31. *Protracheoniscus major* (Dollfus, 1903)
Syn. *P. asiaticus* (non Uljanin), Strouhal, 1929
Loc. Bakony Mts (29); Budapest (9, 10, 41); Zirc (33).

32 . *Protracheoniscus politus* (C. L. Koch, 1841)
Loc. Bátorliget (1, 72, 73); Budai Mts (18); Budapest (41); Cserépfalu (2); Kőszeg Mts (10, 38); Miskolc (2).
Rem. "Hungary" (10).

33. *Trachelipus nodulosus* (C. L. Koch, 1838)
Syn. *Tracheoniscus balticus* Verhoeff, 1907; *Tracheoniscus balticus* var. *burzenlandicus* Verhoeff, 1907
Loc. Ásotthalom (24, 26); Bakháza (13); Basaharc (68); Bélapátfalva (49); Bugac (24, 25, 26, 28); Bükk Mts (49); Celldömölk (10); Csákvár (49); Cserépfalu (2); Gerecse Mts (49); Harkány (39); Keszthely Mts (49); Kiskundorozsma (28); Kőszeg Mts (10, 38); Mailáthpuszta (11, 12); Mecsek Mts (49); Nyírbátor (1); Pilisszentiván (49, 62); Siófok (10); Somló-hegy (49); Szarvaskő (2, 49); Szőreg (26); Tatabánya (49); Vértes Mts (49); Villány Mts (49); Zsombó (28).
Rem. "West-Hungary" (10); "Kiskunsági National Park" (27).

34. *Trachelipus rathkii* Brandt, 1833
Syn. *Porcellio rathkii* Brandt, 1833; *Tracheoniscus rathkei* Brandt, 1833; *Porcellio affinis* C. L. Koch, 1841
Loc. Babócsa (12); Bakháza (13); Balatonberény (70); Barcs, Szilonicspuszta (12); Bátorliget (1, 72, 73); Bélavár (12); Bolhó (12); Budapest (5, 10, 60); Darány (40); Drávafok (12); Drávakeresztúr (12); Drávaszabolcs (12); Drávasztára (12); Felsőszentmárton (12); Felsőtárkány (2); Gordisa (14); Gyékényes (12); Hortobágy (69); Kemse, Háromfa (12); Kisszentmárton (12); Kovácshida (12); Kőszegdoroszló (38); Kőszeg Mts (10, 38); Lakócsa (12); Mailáthpuszta (11); Matty, Keselyősfapuszta (12); Milota (4); Noszvaj (Síkfőkút) (3); Ócsa (61, 63); Óhat (69); Őrtilos (12); Pápa (5, 10); Péterhida (12); Piskó (12); Somogyudvarhely (12); Szaporca (12); Szeged (4); Szentborbás (12); Szilvásvárad (2); Tihany (10, 36); Újpest (5, 10); Újszentmargita (52, 69); Vejti (12); Vindornyaszőlős (47); Vízvár (12); Zákány (12).
Rem.: "Balaton-region" (10).

35. *Trachelipus ratzeburgi* Brandt, 1833
Syn. *Tracheoniscus ratzeburgi* Brandt, 1833; *Porcellio ratzeburgii* Brandt, 1833
Loc. Babócsa (12); Budapest (5, 10); Darány (40); Farkasgyepű (32); Gyékényes (12); Kemse (12); Kőszeg Mts (10, 38); Mecsek (15, 17); Őrtilos (12); Somogyudvarhely (12); Vindornyaszőlős (47); Zákány (12); Zirc (33).

36. *Trachelipus difficilis* Radu, 1950
Syn. *Tracheoniscus affinis* C. L. Koch, 1841; *Tracheoniscus wäc htleri* Strouhal, 1951
Loc. Bátorliget (1); Budapest (5, 10); Bükk Mts (1); Nyírbátor (1); Szilvásvárad (2).
Rem.: "Kiskunsági National Park" (1).

Armadillidiidae

37. *Armadillidium opacum* (C. L. Koch, 1841)
Loc. Cserépfalu (2).

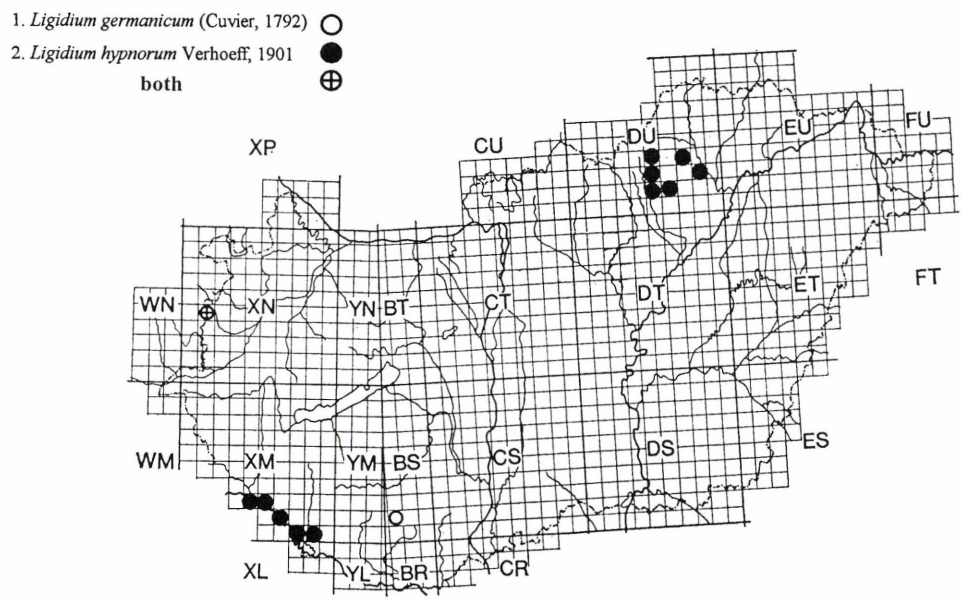
38. *Armadillidium pictum* Brandt, 1833
Loc. Bélapátfalva (49); Bükk Mts (49); Jósvafő (49); Szarvaskő (49); Tornanádaska (49).

39. *Armadillidium nasutum* Budde-Lund, 1885
Loc. Pécs (Farkas, unpublished data).

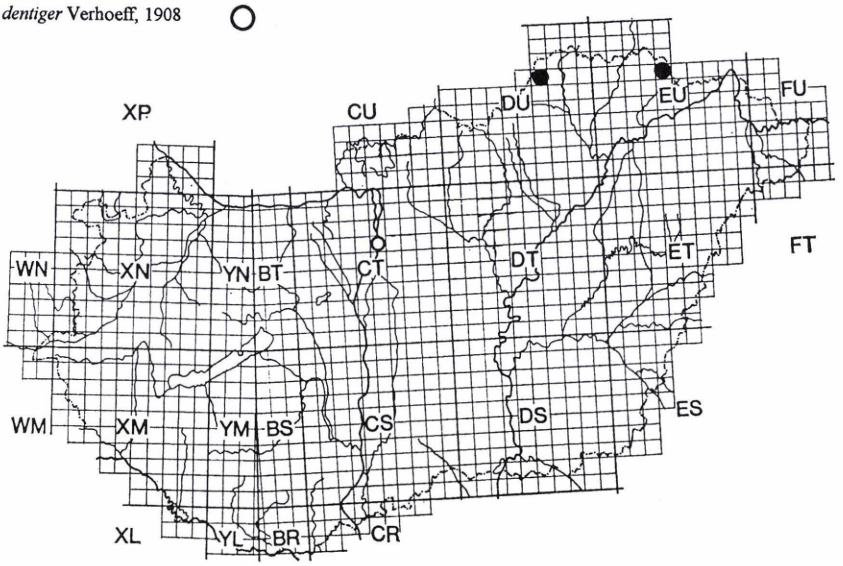
40. *Armadillidium versicolor* Stein, 1859
Syn. *A. versicolor* var. *quinqueseriatum* Verhoeff, 1901; *A. quinqueseriatum* Verhoeff, ?
Loc. Balatonberény (70); Cserépfalu (2); Szilvásvárad (2); Tihany (10, 36).
Rem.: "Hungary" (5, 10).

41. *Armadillidium vulgare* Latreille, 1804
Syn. *A. hungaricum* nov. nom; *A. hungaricum* var. *hungaricum* Csiki, 1926 (= *variegatum* C. L. Koch, 1841); *A. vulgare* var. *affine* Brandt, 1833
Loc. Abaliget (10, 16); Aggtelek (8, 10); Babócsa (12); Bakháza (13); Balatonberény (70); Barcs, Szilonicspuszta (12); Basaharc (68); Bátorliget (1, 72, 73); Bélapátfalva (2); Bodajk (5, 10); Bolhó (12); Budapest (5, 10, 49); Bugac (28); Csákvár (49); Cserépfalu (2); Darány (40); Drávafok (12); Drávakeresztúr (12); Drávaszabolcs (12); Drávasztára (12); Farkasgyepű (32); Felsőszentmárton (12); Gordisa (14); Gyékényes (12); Kemse (12); Kiskundorozsma (28); Kisszentmárton(12); Kőszegdoroszló (38); Kőszeg Mts (10, 38); Kovácshida (12); Kunmadaras (69); Lakócsa (12); Mailáthpuszta (11, 12); Matty, Keselyősfapuszta (12); Mecsek Mts (49); Miskolc (2); Óhat (69); Őrtilos (12); Pápa (5, 10); Péterhida (12); Pilis Mts (49); Pilisborosjenő (49); Piskó (12); Somogyudvarhely (12); Szaporca (12); Szarvaskő (2); Szeged (4); Szentborbás (12); Szilvásvárad (2); Tihany (10, 36); Újpest (5, 10); Újszentmargita (52, 69); Vejti (12); Villány Mts (49); Vindornyaszőlős (47); Visegrád Mts (49); Vízvár (12); Zákány (12); Zirc (30,33); Zsombó (28).
Rem. Maros-bank close to Szeged (4).

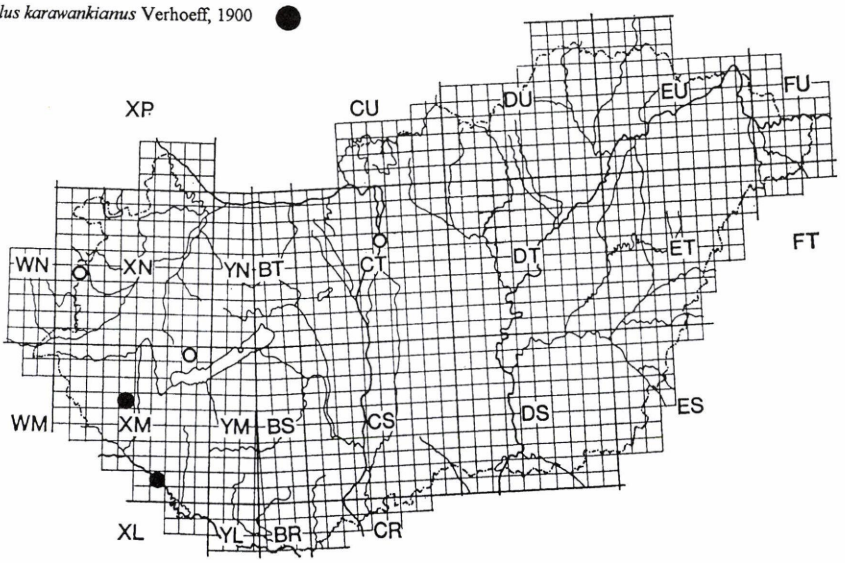
42. *Armadillidium zenckeri* Brandt, 1833
Loc. Balatonberény (70); Ócsa (61, 63).
Rem. "Hungary" (10).



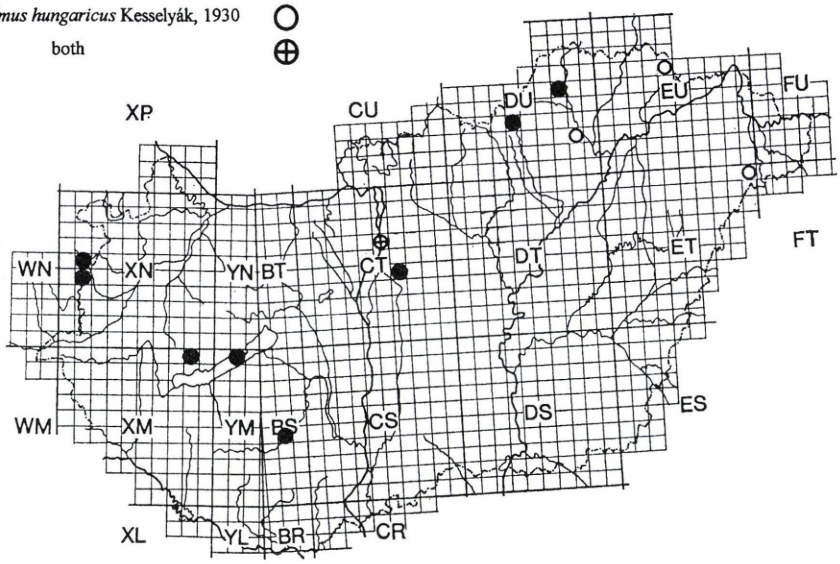
3. *Mesoniscus graniger* (Frivaldszky, 1865) ●
4. *Androniscus dentiger* Verhoeff, 1908 ○



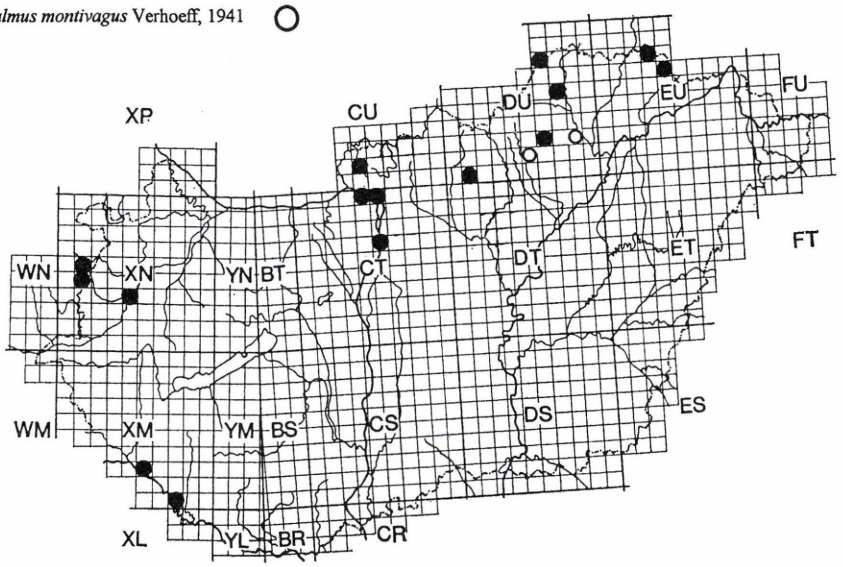
5. *Androniscus roseus* (C.L. Koch, 1838) ○
6. *Cyphoniscellus karawankianus* Verhoeff, 1900 ●



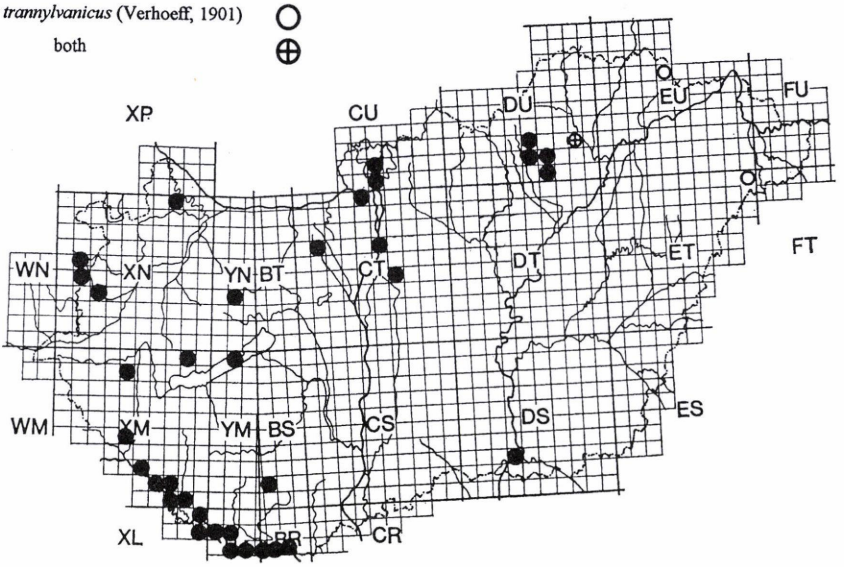
7. *Haplophthalmus danicus* Budde-Lund, 1880
8. *Haplophthalmus hungaricus* Kesselyák, 1930
both



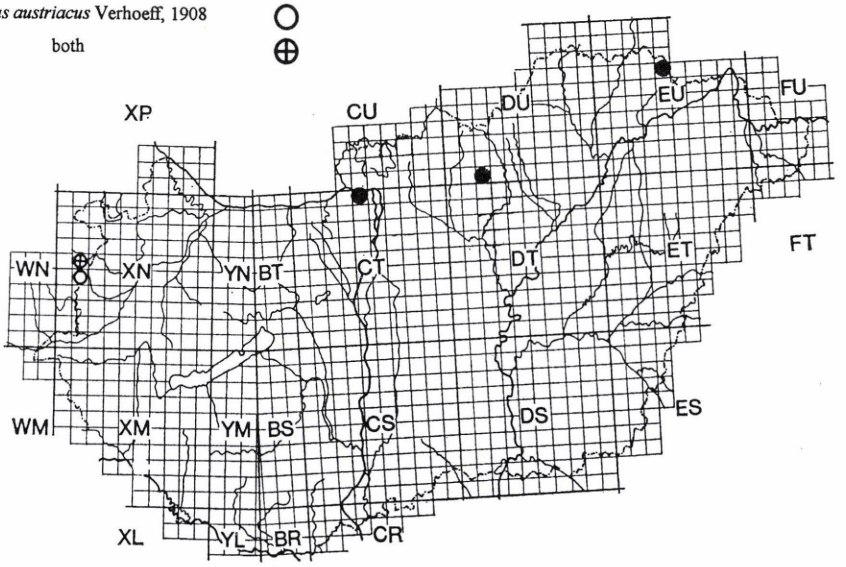
9. *Haplophthalmus mengii* Zaddach, 1844
10. *Haplophthalmus montivagus* Verhoeff, 1941



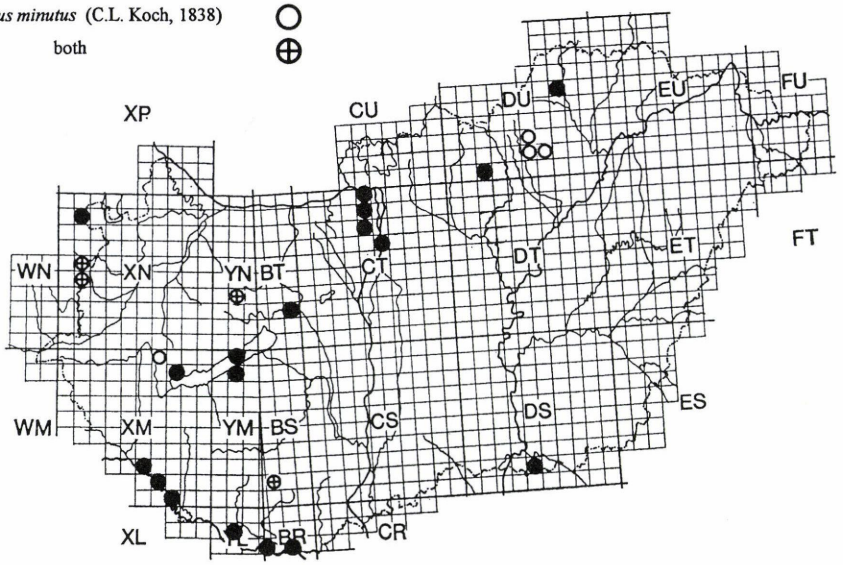
11. *Hyloniscus riparius* (C.L. Koch, 1838)
12. *Hyloniscus transylvanicus* (Verhoeff, 1901)
both



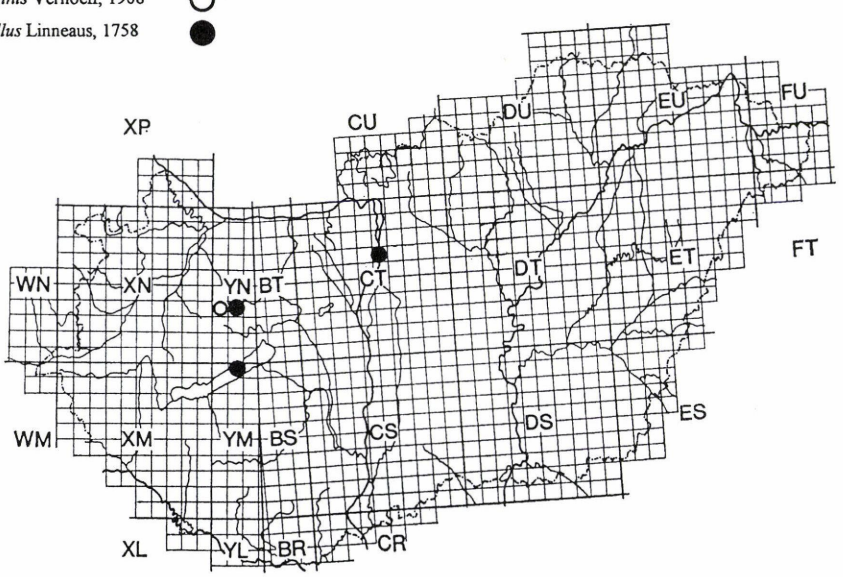
13. *Trichoniscus noricus* Verhoeff, 1917, 1931
14. *Trichoniscus austriacus* Verhoeff, 1908
both



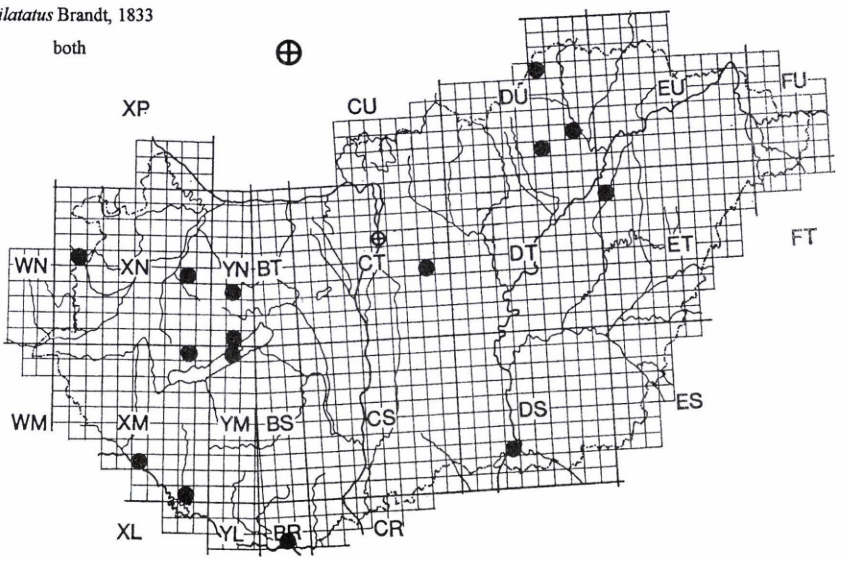
15. *Platyarthrus hoffmannseggii* Brandt, 1833
16. *Lepidoniscus minutus* (C.L. Koch, 1838)
both



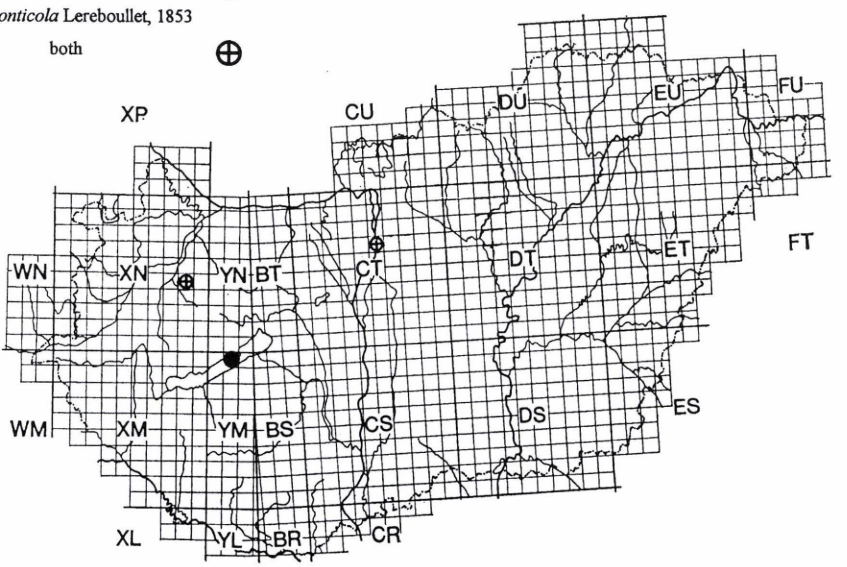
17. *Philoscia affinis* Verhoeff, 1908
18. *Oniscus asellus* Linneaus, 1758



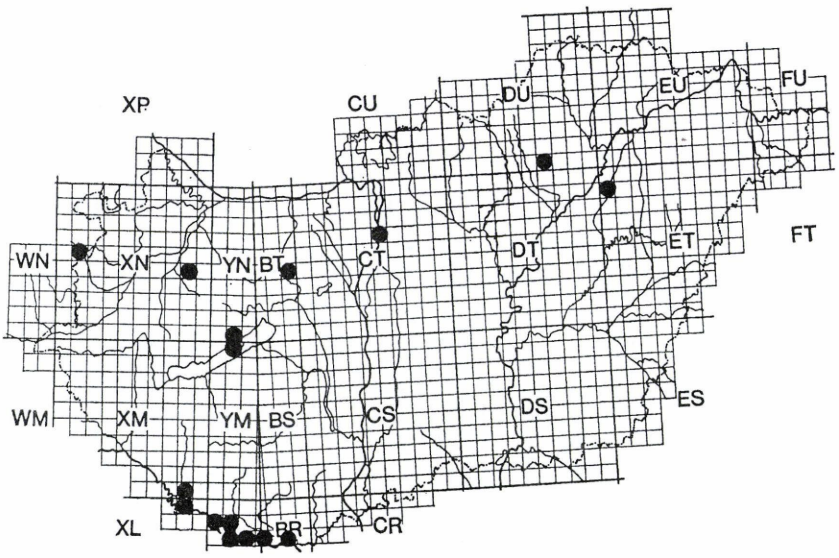
19. *Cylisticus convexus* De Geer, 1778 ●
20. *Porcellio dilatatus* Brandt, 1833
both ⊕



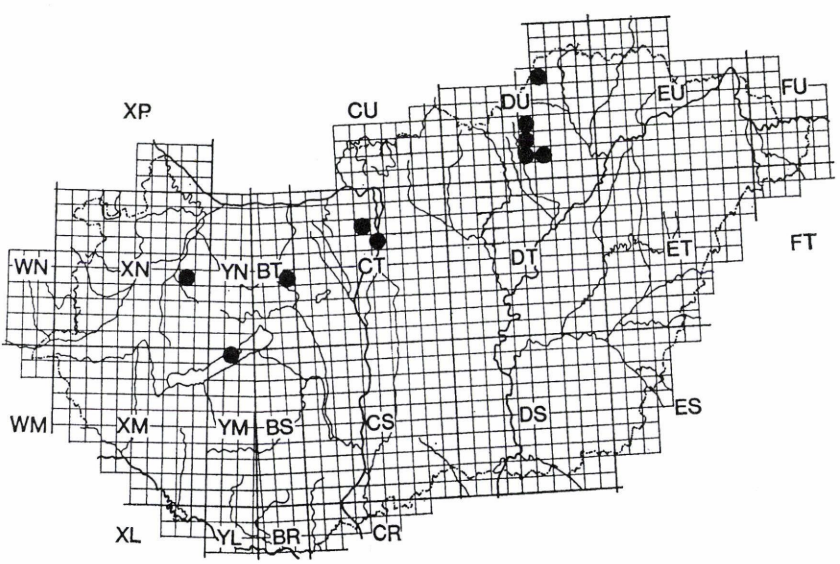
21. *Porcellio laevis* Latreille, 1804 ●
22. *Porcellio monticola* Lereboullet, 1853
both ⊕



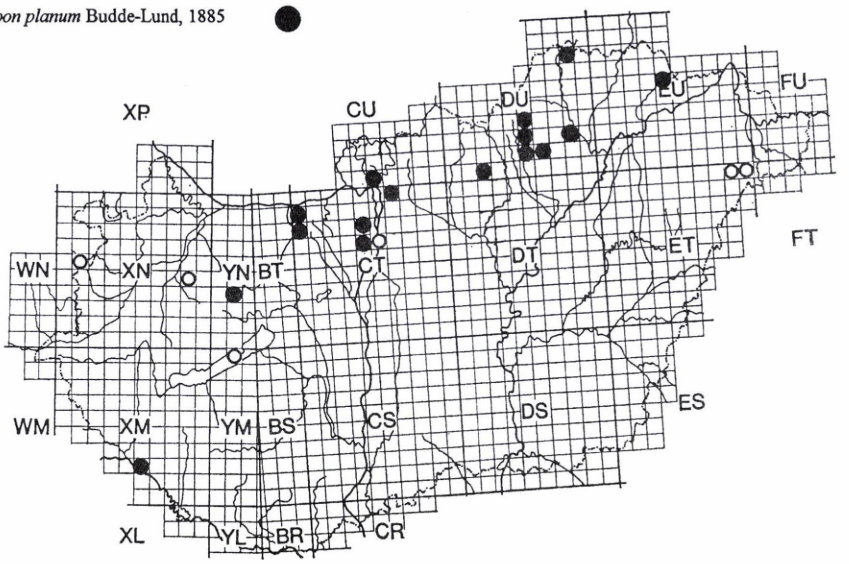
23. *Porcellio scaber* Latreille, 1804



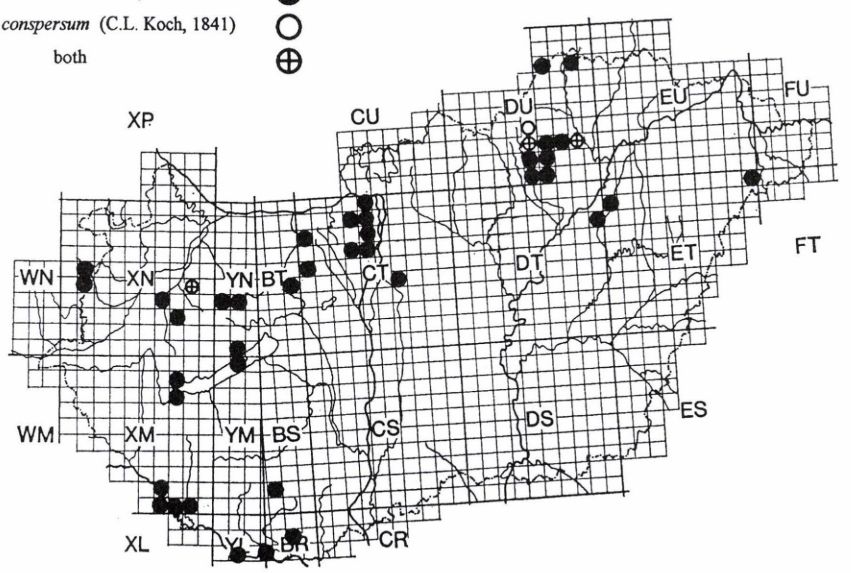
24. *Porcellio spinicornis* Say, 1818



25. *Porcellionides pruinosus* Brandt, 1833
26. *Orthometopon planum* Budde-Lund, 1885



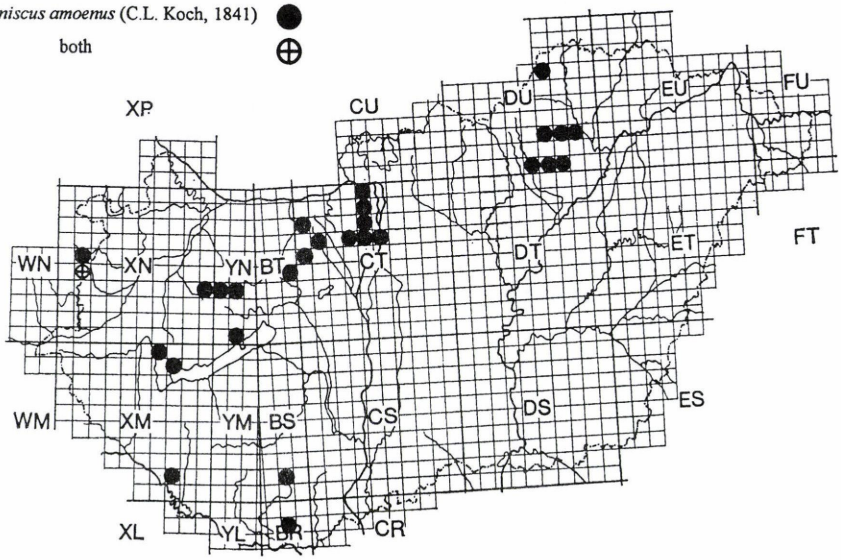
27. *Porcellium collicola* Verhoeff, 1907
28. *Porcellium conspersum* (C.L. Koch, 1841)
both



29. *Porcellium graevei* Verhoeff, 1919

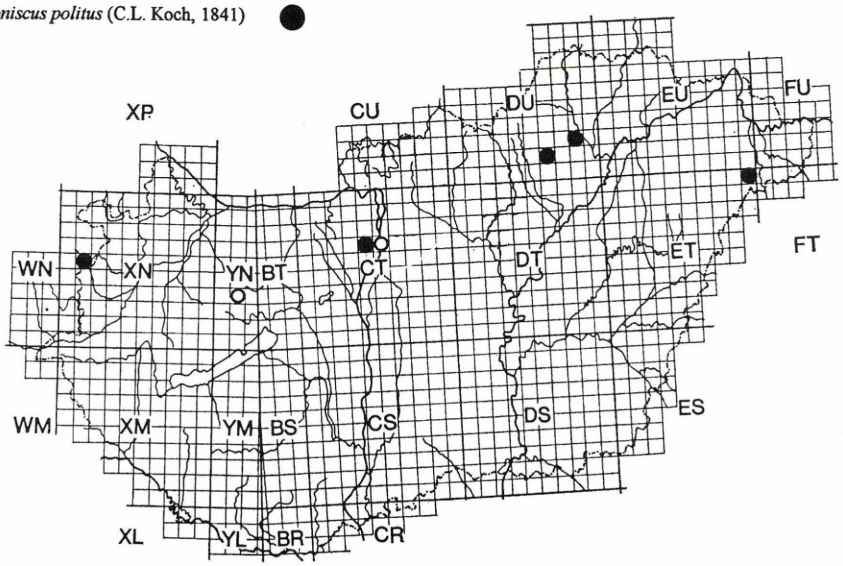
30. *Protracheoniscus amoenus* (C.L. Koch, 1841) ●

both ⊕

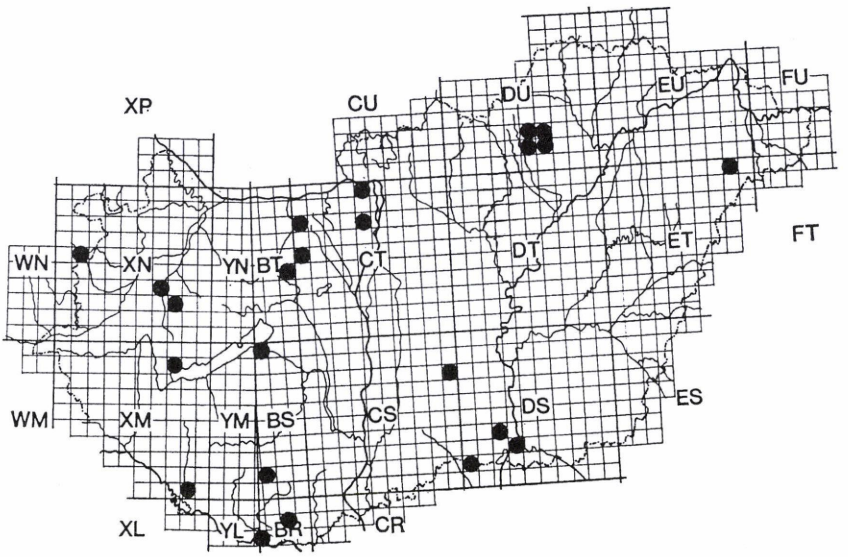


31. *Protracheoniscus major* (Dollfus, 1903) ○

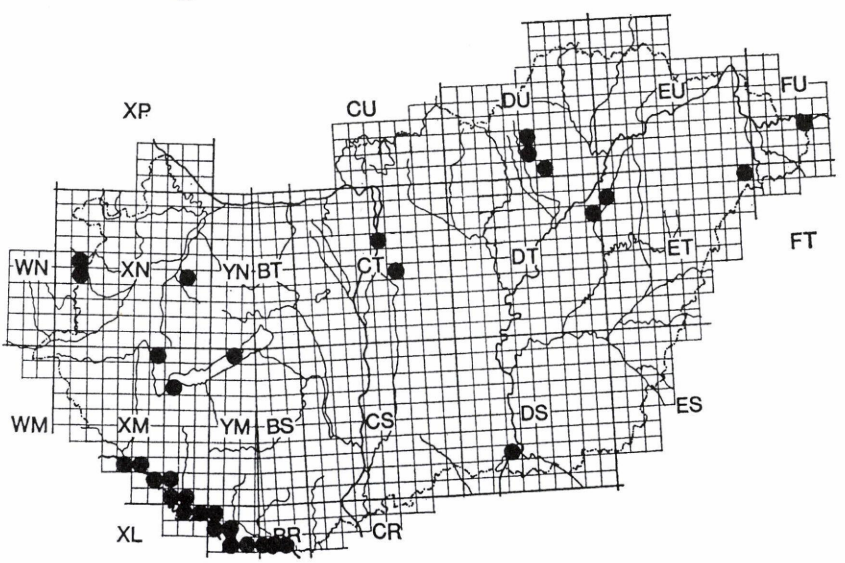
32. *Protracheoniscus politus* (C.L. Koch, 1841) ●



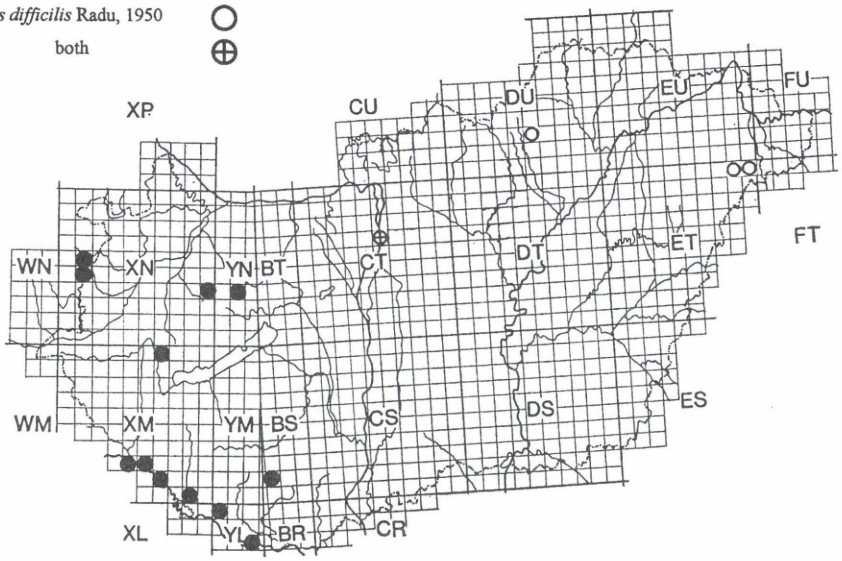
33. *Trachelipus nodulosus* (C.L. Koch, 1838)



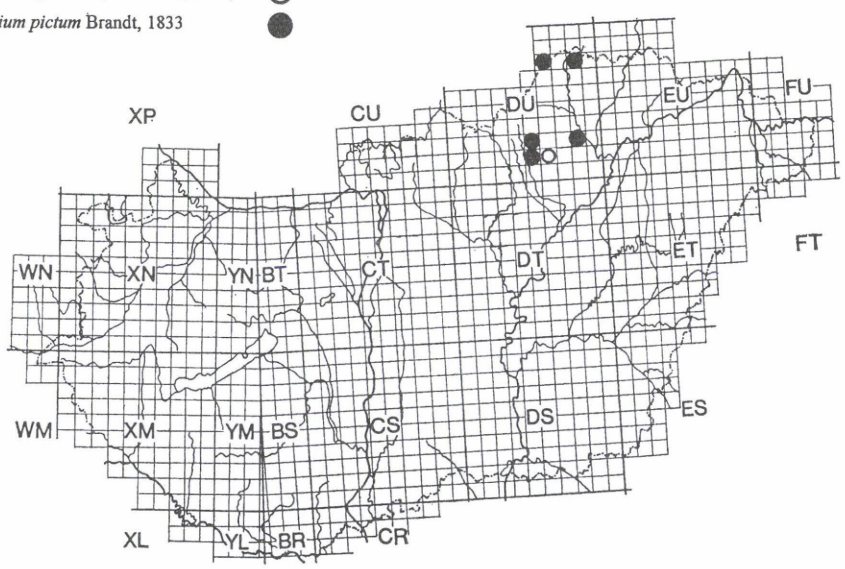
34. *Trachelipus rathkii* Brandt, 1833



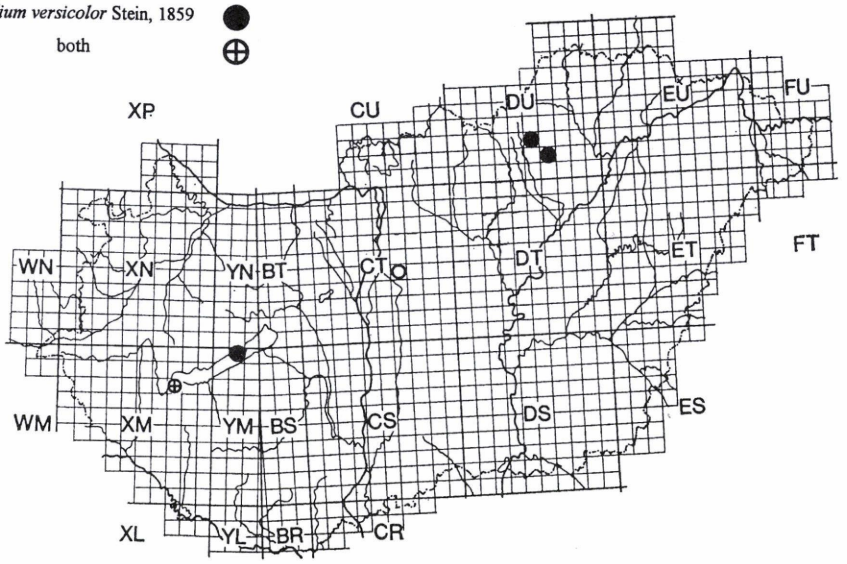
35. *Trachelipus ratzeburgi* Brandt, 1833 ●
36. *Trachelipus difficilis* Radu, 1950 ○
both ⊕



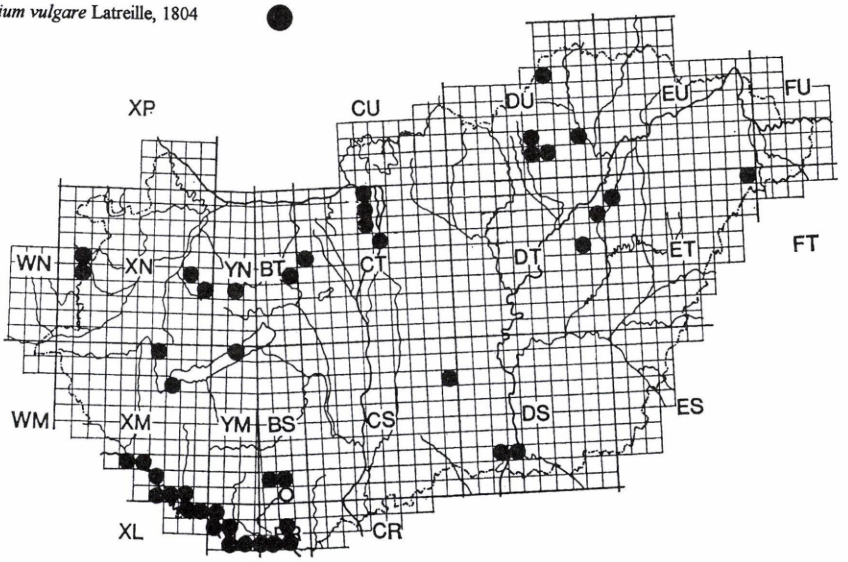
37. *Armadillidium opacum* (C.L. Koch, 1841) ○
38. *Armadillidium pictum* Brandt, 1833 ●



39. *Armadillidium zenckeri* Brandt, 1833
40. *Armadillidium versicolor* Stein, 1859
both



41. *Armadillidium nasutum* Budde-Lund, 1885
42. *Armadillidium vulgare* Latreille, 1804



References

1. Allspach, A. & Szlávecz, K. (1990): The terrestrial Isopod (Isopoda: Oniscidea) fauna of the Bátorliget Nature Reserves. – In: Mahunka, S. (ed.): *The Bátorliget Nature Reserves – after forty years.* Hungarian Natural History Museum, Budapest, pp. 250–257.
2. Allspach, A. (1996): The terrestrial Isopods of the Bükk National Park (Crustacea; Isopoda; Oniscidea). – In: Mahunka, S. (ed.): *The fauna of the Bükk National Park, II.* – Hungarian Natural History Museum, Budapest, pp. 71–74.
3. Ábrahám, A., Biczók, F., Horváth, A. & Megyeri, J. (1956): Hydrobiologische und faunistische Studien im südwestlichen Teile des Bükk-Gebirges. – *Acta biol. Szeged* **2**: 137–154.
4. Beretzk, P., Csongor, Gy., Horváth, A., Kárpáti, A., Kolosváry, G., Marián, M., Szabados, M., Ferenc, Sz. M., Vásárhelyi, I. & Zicsi, A. (1958): Das Leben der Tisza. VII. Die Tierwelt der Tisza auf Grund neuerer Sammlungen und Beobachtungen. – *Acta biol. Szeged* **4**: 203–235.
5. Csiki, E. (1926): Magyarország szárazföldi Isopodái (Isopoda terrestria Hungariae) (Die Landisopoden Ungarns). – *Annls hist.-nat Mus. natn. hung.* **23**: 1–79.
6. Dudich, E. (1925): Faunisztikai jegyzetek (Faunistische Notizen) I. – *Állatt. Közlem.* **22**: 39–46.
7. Dudich, E. (1928): Faunisztikai jegyzetek (Faunistische Notizen) III. – *Állatt. Közlem.* **24**: 38–45.
8. Dudich, E. (1932): Biologie der Aggteleker Tropfsteinhöhle "Baradla" in Ungarn. – *Speläolog. Monogr.* **13**: 1–246.
9. Dudich, E. (1933): Faunisztikai jegyzetek (Faunistische Notizen) IV. – *Állatt. Közlem.* **30**: 120–129.
10. Dudich, E. (1942): Nachtrge und Berichtigungen zum Crustaceen-Teil des ungarischen Faunenkataloges II. – *Fragm. Faun. Hung.* **5**: 1–13.
11. Farkas, S. (1995): Adatok a Dráva ártér Isopoda (Crustacea: Oniscoidea) faunájához (Data on the Isopoda (Crustacea: Oniscoidea) fauna of Drava lowland, Hungary). – *Dunántúli Dolg. Term. tud. Sorozat* **8**: 25–30.
12. Farkas, S. (1997): Azászkarák (Crustacea: Isopoda) kutatások faunisztikai eredményei a Dráva mentén (The faunistic results of the study of woodlice (Crustacea: Isopoda) along the river Dráva). – *Dunántúli Dolg. Term. tud. Sorozat*, (in press)
13. Farkas, S. (1998a): A Rinya-ártér Isopoda faunája I. Bakháza. (The Isopoda fauna of the Rinya region I. Bakháza). – *Somogy-m.-i Múzeumi Közlemények* **13**: 261–266.
14. Farkas, S. (1998b): Population dynamics, spatial distribution and sex ratio of *Trachelipus rathkei* Brandt (Oniscoidea: Isopoda) in a wetland forest by the river Dráva. – *Israel Journal of Zoology* **44**: 323-331
15. Gebhardt, A. (1933): A Mecsekhegység forrásainak élővilága [Fauna of the springs of the Mecsek Mts]. – *Matematikai és Természettudományi Értesítő* **49**: 148–165.
16. Gebhardt, A. (1934): Az abaligeti barlang élővilága [Fauna of the Abaliget cave]. – *Matematikai és Természettudományi Közlemények* **37**: 1–264.
17. Gebhardt, A. (1960): A Mecsek hegység forrásainak faunisztikai és biológiai vizsgálata [Faunistic and biological investigations of the springs of the Mecsek Mts]. – *Janus Pannonius Múzeum évkönyve.* 7–38.
18. Gere, G. (1956): Erdei avarfogyasztó Diplopoda és Isopoda fajok humifikációs szerepének vizsgálata növénynevelés módszerrel (The role of diplopods and isopods in humification studied with the plant growing method). – *Állatt. Közlem.* **45**: 71–78.
19. Gere, G. (1959): Beobachtungen über die Entwicklung des *Protracheoniscus amoenus* C. L. Koch im Freiland. – *Opusc. zool. Budapest* **3**: 29–36.
20. Gere, G. (1962): Nahrungsverbrauch der Diplopoden und Isopoden in Freilandsuntersuchungen. – *Acta zool. hung.* **8**: 385–415.
21. Gere, G. (1963): Über einige Faktoren des Streuabbaues. – In: Doeksen, J. & J. van der Drift (eds): *Soil organisms. Proceedings of the Colloquium on soil fauna, soil microflora and their relationships.* North-Holland Publishing Company, Amsterdam, pp. 67–75.
22. Gere, G. (1964): Untersuchungen über die Temperaturtoleranz von *Mesoniscus graniger* J. Friv. (Crust. Isop.). – *Annls univ. sci. Budapest, Sect. biol.* **7**: 95–103.

23. Gere, G. (1965): Fütterungsversuche mit bodenbewohnenden Diplopoden und Isopoden in der Baradla-Höhle bei Aggtelek (Ungarn). – *Opusc. zool. Budapest* **5**: 193–196.
24. Hornung, E. (1981): Investigations on the productivity of the macrodecomposer isopod *Trachelipus nodulosus* C. L. Koch. – *Acta biol. Szeged* **27**: 203–208.
25. Hornung, E. (1984): Characteristics of the population of an isopoda species (*Trachelipus nodulosus* C. L. Koch) at a sandy soil grassland. – *Acta biol. Szeged* **30**: 153–158.
26. Hornung, E. (1988): Preliminary data to the clutch-size of *Trachelipus nodulosus* C. L. Koch in different habitats. – *Acta biol. Szeged* **34**: 169–171.
27. Hornung, E. (1989): Population dynamics and spatial distribution of *Trachelipus nodulosus* (C. L. Koch, 1838) (Crustacea:Isopoda) in a sandy grassland. – *Monitore Zool. Ital. (N.S.) Monogr.* **4**: 399–409.
28. Hornung, E. (1991): Comparison of different grassland types based on isopod communities. – In: *Proceedings of the 4th ECE/XIII SIEEC Gödöllő*, pp. 741–746.
29. Ilosvay, Gy. (1978): A Bakony Természettudományi Múzeum Isopoda, Diplopoda és Chilopoda gyűjteményéről, illetve a Bakony-hegység Isopoda, Chilopoda és Diplopoda faunájának kutatottságáról. – *A hetedik Bakony-kutató Ankét, Zirc*: 19–23.
30. Ilosvay, Gy. (1982a): A zirci arborétum Isopoda és Diplopoda faunájának ökológiai vizsgálata (Die ökologische Untersuchung der Isopoden- und Diplopoden-Fauna des Arboretums von Zirc). – *A Magas-Bakony természettudományi kutatásának újabb eredményei – Bakonyi Természettudományi Múzeum, Zirc*: 53–66.
31. Ilosvay, Gy. (1982b): A talajfelszínen mozgó állatok napszakos aktivitásának vizsgálata a farkasgyepűi bükkösben (Die Untersuchung der Tageszeitaktivität der sich an der Bodenoberfläche bewegenden Tiere im Buchenwald von Farkasgyepű). – *Folia Mus. hist. nat. Bakony.* **1**: 171–180.
32. Ilosvay, Gy. (1983): A farkasgyepűi bükkös ökoszisztéma Isopoda, Chilopoda és Diplopoda faunájának ökológiai vizsgálata (Die ökologische Untersuchung der Isopoden-, Chilopoden- und Diplopoden-Fauna im Ökosystem des Buchenwaldes von Farkasgyepű). – *Folia Mus. hist. nat. Bakony.* **2**: 55–88.
33. Ilosvay, Gy. (1985): A zirci arborétum Isopoda, Diplopoda és Chilopoda faunájáról (Über die Isopoda-, Diplopoda- und Chilopoda-Fauna des Zircer Arboretums). – *A Bakony Természettudományi Kutatásának Eredményei, 16 – A Zirci Arborétum Élővilága* **1**: 43–49.
34. Kesselyák, A. (1928): Miként fejlődött a Haplophthalmusok párzószerve? – Bölcsészetdoktori értekezés, pp. 1–19.
35. Kesselyák, A. (1930): Faunistisches über Isopoden. – *Zoolog. Jahrbücher Abt. Syst.* **60**: 239-256.
36. Kesselyák, A. (1935/36): A Tihanyi félsziget Isopoda-faunája (Die Isopodenfauna der Halbinsel von Tihany). – *Magyar Biol. Kut. Int. I. osztályának közleménye*: 82–88.
37. Kesselyák, A. (1936): Bars vármegye szárazföldi ászkarákjai (Die Landasselfauna von Komitat Bars). – *Állatt. Közlem.* **33**: 142–148.
38. Kesselyák, A. (1937): A kőszegi hegység szárazföldi ászkarákfaunája (Die Landasselfauna des Kőszeger Gebirges). – *Vasi Szemle* **4**: 89–96.
39. Kolosváry, G. (1937): Újdonságok a dinári állattartományból (Über Neuigkeiten des Dinaricums in Ungarn). – *Acta biol. Szeged* **4**: 160–162.
40. Lantos, G. (1985): Amphipoda és Isopoda faunisztikai adatok a Barcsi Borókás Tájvédelmi Körzetből (Amphipoda and Isopoda (Crustacea) data from the Barcs Juniper Woodland nature preservation area, Hungary). – *Dunántúli Dolg. Term. Tud. Sorozat* **5**: 89–92.
41. Loksa, I. (1958): Budapest és környékének állatvilága [The fauna of Budapest and its environs]. – In: Pécsi, M. (szerk.): *Budapest földrajza I. Budapest természeti képe*. Akadémiai Kiadó, Budapest, pp. 643–661.
42. Loksa, I. (1959): Ökologische und faunistische Untersuchungen in der Násznép-Höhle des Naszály-Berges (Biospeologica Hungarica, VI.) – *Opusc. zool. Budapest* **3**: 63–80.
43. Loksa, I. (1960a): Faunistisch-systematische und ökologische Untersuchungen in der Lóczy-Höhle bei Balatonfüred. (Biospeologica Hungarica,, XI.) – *Annls univ. sci. Budapest, Sect. biol.* **3**: 253–266.

44. Loksa, I. (1960b): Über die Landarthropoden der Teichhöhle von Tapolca (Ungarn) (Biospeologica Hungarica, VIII.) – *Opusc. zool. Budapest* **4**: 39–51.
45. Loksa, I. (1961a): Quantitative Untersuchungen streuschichtbewohnender Arthtropoden-Bevölkerungen in einigen ungarischen Waldbeständen. – *Annls univ. sci. Budapest, Sect. biol.* **4**: 99–112.
46. Loksa, I. (1961b): Ökologisch-faunistische Untersuchungen in der Freiheitshöhle bei Égerszög (Biospeologica Hungarica, XIII). – *Acta zool. hung.* **7**: 219–230.
47. Loksa, I. (1961c): A Kovácsi-hegy ízeltlábúiról (Die Arthropoden des Kovácsi-Berges). – *Állatt. Közlem.* **48**: 65–80.
48. Loksa, I. (1962): Über die Landarthropoden der István-, Forrás- und Szeleta-Höhle bei Lillafüred. – *Karszt- és Barlangkutatás* **3**: 59–81.
49. Loksa, I. (1966): *Die bodenzoozönologischen Verhältnisse der Flaumeichen-Buschwälder Südostmitteleuropas* – Akadémiai Kiadó, Budapest, 437 pp.
50. Loksa, I. (1968): Quantitative Makrofauna-Untersuchungen in den Waldböden des Bükkgebirges (Ungarn). – *Annls univ. sci. Budapest, Sect. biol.* **9-10**: 265–289.
51. Loksa, I. (1971): Zoozönologische Untersuchungen im nördlichen Bakony-Gebirge. – *Annls univ. sci. Budapest, Sect. biol.* **13**: 301–314.
52. Loksa, I. (1973): Bodenzoologische Untersuchungen in den Alkali-Waldsteppen von Margita, Ungarn 1. Untersuchungen der Arthropoden-Makrofauna, nebst Bemerkungen über die Oniscoidea-Arten. – *Opusc. zool. Budapest* **11**: 79–93.
53. Loksa, I. (1977): Két gyertyános-tölgyes mintaterület ászkarák, ikerszelvényes és százlábú népességeiről. – *MTA Biol. Oszt. Közl.* **20**: 207–211.
54. Loksa, I. (1979): Quantitative Untersuchungen über die Makrofauna der Laubstreu in Zerreichen- und Hainsimsen-Eichen-Beständen des Bükk-Gebirges. – *Opusc. zool. Budapest* **16**: 87–96.
55. Méhely, L. (1927): Gibt es zweiägige Trichonisciden?. – *Zool. Anz.* **72**: 1–4.
56. Méhely, L. (1929): Species generis *Hyloniscus*. – *Stud. Zool.* **1**: 1–75.
57. Méhely, L. (1932): Adatok az ecsetcsápú rákok anatómiájához (Beiträge zur Anatomie der Trichonisciden). – *Stud. Zool.* **2**: 83–120.
58. Méhely, L. (1933): Csiki Ernő szárazföldi Isopodái című művének bírálata. – Budapest: 1–18.
59. Pobozsny, M. (1978): Nahrungsansprüche einiger Diplopoden- und Isopoden-Arten in mesophilen Laubwäldern Ungarns. – *Acta zool. hung.* **24**: 397–406.
60. Pongrácz, S. (1936): Helyesbítések a magyar fauna jegyzékében (Berichtigungen in der Enumeration der ungarischen Fauna). – *Állatt. Közlem.* **33**: 181–193.
61. Sallai, Á. (1992a): Cönológiai vizsgálatok az Ócsai Tájvédelmi Körzet területén, különös tekintettel a talajlakó makrofauna tagjaira (Diplopoda, Isopoda, Chilopoda) (The investigation of animal communities in the Ócsa Landscape Protection Area with special emphasis on the soil-dwelling macrofauna (Diplopoda, Isopoda, Chilopoda)). – *Állatt. Közlem.* **78**: 77–87.
62. Sallai, Á. (1992b): On the soil-inhabiting macrofauna of Nagy-Szénás, with special reference to the isopods, diplopods and chilopods. – *Opusc. zool. Budapest* **25**: 95–102.
63. Sallai, Á. (1993): Ecofaunistical investigations in a boggy forest in the Protected Landscape Area at Ócsa (Kiskunság National Park, Hungary). – *Opusc. zool. Budapest* **26**: 85–94.
64. Strouhal, H. (1965): Die *Haplophthalmus*-Arten Ungarns (Isopoda terrestria). – *Acta zool. hung.* **11**: 465–473.
65. Székelyhidy, E. H. & Loksa, I. (1979): Oniscoiden-, Diplopoden- und Chilopoden-Gemeinschaften im Untersuchungsgebiet "Síkfőkúti Projekt" (Ungarn). – *Opusc. zool. Budapest* **16**: 151–174.
66. Székessy, V. (1953): Bátorliget szárazföldi ászkarák-faunája. Isopoda [The Crustacea fauna of Bátorliget]. – In: Székessy V. (szerk.): *Bátorliget élővilága* [*The biota of Bátorliget.*]. – Akadémiai Kiadó, Budapest, p. 173.
67. Szlávecz, K. (1985): The effects of microhabitats on the leaf litter decomposition and on the distribution of soil animals. – *Holarctic Ecology* **8**: 33–38.
68. Szlávecz, K. (1988): The isopod fauna of the Pilis Biosphere Reserve I. Basaharc loess mine. – *Opusc. zool. Budapest* **23**: 189–199.

69. Szlávecz, K. (1991): The terrestrial isopod fauna of the Hortobágy National Park. – *Miscnea zool. hung.* **6**: 61–66.
70. Szlávecz, K. (1992): The role of terrestrial isopods (Isopoda: Oniscidea) in the decomposition of aquatic macrophite detritus of Lake Balaton, Hungary. – *Opusc. zool. Budapest* **25**: 103–112.
71. Szlávecz, K. (1993): Needle litter consumption in two terrestrial isopods, *Protracheoniscus amoenus* (C. L. Koch) and *Cylisticus convexus* (de Geer) (Isopoda, Oniscidea). – *Pedobiologia* **37**: 57–64.
72. Szlávecz, K. (1995): Diversity and spatial community structure of terrestrial isopods (Isopoda, Oniscidea) in a mosaic of plant assemblages. – In: Alikhan, M.A. (ed.): *Terrestrial Isopod Biology*. Crustacean Issues **9**: 97–105.
73. Szlávecz, K. & Loksa, I. (1991): Diversity of soil arthropods in the Bátorliget Nature Reserve, Hungary. – *Proceedings of the 4th ECE/XIII. SIEEC, Gödöllő*, pp. 801–807.

Other references

Chyzer, K. (1858): Ueber die Crustaceen-Fauna Ungarns. – *Verh. zool.-bot. Ges. Wien.* **8**: 505–518.
Chyzer, K. & Tóth, S. (1857a): A Budapest vidékén eddig talált héjanczokról. – *Magyarhoni természetbarát* **1**: 75–88.
Chyzer, K. & Tóth, S. (1857b): Die Crustaceen der Pest-Ofener Gegend. – *Naturfreund Ungarns* **1**: 84–100.
Daday, J. (1896): *Classis Crustacea*. A Magyar Birodalom Állatvilága (Fauna Regni Hungariae). III. Arthropoda. – Királyi Magyar Természettudományi Társulat, Budapest, 12 pp.
Dollfus A. (1901): Catalogue des Isopodes terrestres de Hongrie, appartenant au Muséum National de Budapest. – *Természetrajzi Füzetek* **24**: 143–151.
Fischer, E., Farkas, S., Hornung, E. & Past, T. (1997): Sublethal effects of an organophosphorous insecticide, Dimethoate, on the isopod *Porcellio scaber* Latr. – *Comp. Biochem. Physiol.***116C**: 161–166.
Frivaldszky, I. (1865): Jellemző adatok Magyarország faunájához [Contributions to the fauna of Hungary]. – *Magyar Tudományos Akadémia Évkönyve* **11 (4)**: 1–274.
Frivaldszky, J. (1865): Adatok a magyarhoni barlangok faunájához [Contributions to the fauna of Hungarian caves]. – *Math. term.-tud. Közlem.* **3**: 17–53.
Gruner, H.-E. (1966): *Krebstiere oder Crustacea V. Isopoda 2.* – In: Die Tierwelt Deutschlands und der angrenzenden Meeresteile **53**: 151–380.
Hornung, E., Fischer, E. & Farkas, S. (1998): Reproduction as an endpoint of sublethal toxicity tests in isopods. – *Israel Journal of Zoology* **44**: 445–450.
Margó, T. (1879): Budapest és környéke állattani tekintetben [Budapest and its surroundings from the zoological point of view]. – Budapest, 116 pp.
Schmidl, A. (1856): Die Baradla-Höhle bei Aggtelek und die Lednice-Eishöhle bei Szilitze im Gömörer Komitate Ungarns. – *Sitz.-ber. Akad. Wiss. Wien, Math.-naturwiss. Kl.* **22**: 579–621.
Schmidt, C. (1997): Revision of the European species of the genus *Trachelipus* Budde-Lund, 1908 (Crustacea: Isopoda: Oniscidea). – *Zool. J. Linn. Soc.* **121**: 129–244.
Szlávecz, K. (1991): Szárazföldiászkarákok (Isopoda: Oniscidea) táplálékválasztása laboratóriumi kísérletekben (Food selection of terrestrial isopods in laboratory experiments). – *Állatt. Közlem.* **77**: 125–135.
Szlávecz, K. & Maiorana, V.C. (1990): Food selection by isopods in paired choice tests. – Proc. Third Symp. on the Biology of Terrestrial Isopods, Poitiers, France, 115–121.
Szlávecz, K. & Maiorana, V.C. (1998): Supplementary food in the diet of the terrestrial isopod *Porcellio scaber* Latr. (Isopoda: Oniscidea). – *Israel Journal of Zoology* **44**: 413-421.
Szlávecz, K. & Pobozsny, M. (1995): Coprophagy in isopods and diplopods: a case for interaction. – *Acta zool. fenn.* **196**: 124–128.

Acknowledgements

Several colleagues helped in the preparation of earlier drafts of the manuscript. We are particularly grateful to A. Allspach and C Schmidt for their help in taxonomical problems. K. Szlávecz was extremely helpful providing literature data and improving the English of the manuscript. One of us (S. F.) would like to thank for the support from the Hungarian Scientific Research Fund (OTKA No. F 020065).

Authors' adresses: Dr. László Forró
Hungarian Natural History Museum
Department of Zoology
Pf. 137.
H-1431 Budapest, Hungary,
E-mail: forro@zoo.zoo.nhmus.hu

Dr. Sándor Farkas
Department of Ecology and Zoogeography
Janus Pannonius University
Ifjúság u. 6.
H-7601 Pécs, Hungary,
E-mail: farkas@ttk.jpte.hu